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## ***Skill Procedures:***

### ***Nasotracheal Intubation***

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#### ***I. Usage***

1. This protocol describes the technique for performing nasotracheal intubation. Nasotracheal intubation is not covered by standing orders.



**Note Well:** *A physician order from Medical Control is mandatory before attempting this procedure.*

#### ***II. Indications***

1. Use when intubation is indicated but direct visualization of the posterior pharynx is contraindicated or difficult.
2. Useful in breathing, comatose patients requiring intubation.
3. Asthma or pulmonary edema with respiratory failure, where intubation may need to be achieved in a sitting position.



#### ***III. Contraindications***

1. Do not use in patients with significant nasal or mid-facial trauma.
2. Suspected basilar skull fracture.
3. Known bleeding disorder or patient on anticoagulation therapy.
4. Apnea.
5. Children less than 15 years of age.



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#### ***IV. Procedural Protocols***

1. Choose correct ET tube size (usually 7.5 or 8 mm tube in adults). Limitation is nasal canal diameter.
2. Position patient
  - A. Head in midline, neutral position (C-collar may be in place, or team member may hold in line cervical spinal stabilization in trauma patients).
3. Assist ventilations with 100% oxygen and bag-valve-mask prior to procedure if spontaneous respirations are inadequate.
4. Lubricate ET tube.
5. With gentle steady pressure, advance the tube through the nose to the posterior pharynx. Use right nostril if possible.
6. Keeping the curve of the tube exactly in midline, continue advancing slowly.
7. There will be a slight resistance just before entering trachea. Wait for an inspiratory effort before final advance into trachea. Patient may also cough or buck just before the breath.
8. Continue advancing until air is exchanging through the tube.
9. Advance about one inch further, then inflate cuff.

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#### ***IV. Procedural Protocols (continued)***

10. Ventilate and watch for chest rise. Listen for breath sounds:
  - A. Over stomach - no sounds should be heard.
  - B. Four lung fields.
  - C. Axillae.



**Note Well:** Auscultation may reveal decreased breath sounds on left indicating intubation of the right mainstem bronchus. If so, gently pull tube back and re-auscultate for improved breath sounds.

11. Note proper tube position and tape securely.
12. Recheck breath sounds.

#### ***V. Notes***



1. Head must be exactly in midline for successful intubation.
2. ***Nasotracheal intubation is more time-consuming than orotracheal intubation. Therefore, it is not a first line procedure.*** The situation should be quiet enough to hear air exchange.
3. Examine nares carefully. Often nares are asymmetrical and one side is much easier to intubate. Avoid inducing bilateral nasal hemorrhage by forcing a nasotracheal tube on multiple attempts. Attempts will be limited to 2 - utilizing only one naris.

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**Note Well**

1. *If tube placement is questionable, remove ET and ventilate with 100% oxygen and BVM.*
2. *Whenever the patient is moved re-auscultate as per Section IV "Procedure Protocols," item 10, to ensure proper tube placement is maintained.*
3. *The secret of blind intubation is perfect positioning and gentle patience.*
4. *Medical Control may order lidocaine (1 mg/Kg) IV prior to intubation for patients with suspected increased intracranial pressure (i.e., closed head injury, intracranial bleed, etc.).*

